



TDS/ #6  
J/4/65/06

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Rajinder S. Sidhu, et al.  
Serial No.: 09/937,052

International Application No. PCT/US00/07995

International Filing Date March 23, 2000

Confirmation No. 4656

Group: 1646

Examiner: Unassigned

For: **FUNGAL BETA-TUBULIN GENES**

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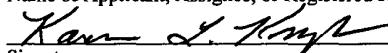
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Karen L. Knezek  
Registration No. 39,253  
Name of Applicant, Assignee, or Registered Representative  
  
Signature  
March 12, 2002  
Date of Signature

Dear Sir:

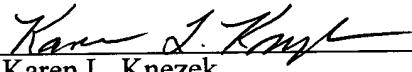
**INFORMATION DISCLOSURE STATEMENT**

Applicants hereby submit the enclosed Information Disclosure Statement pursuant to 37 C.F.R. § 1.97(b)(3), or in the alternative, 37 C.F.R. §1.97(c) should the mailing date of the first office action precede the filing of this statement. If the first office action occurs before receipt of this document, pursuant to 37 C.F.R. §1.97(c) and §1.17(p), please withdraw the necessary fee of \$180.00 from Deposit Account No. 18-1260. If this amount is insufficient, please deduct any additional fees from Deposit Account No. 18-1260. A copy of this document is enclosed.

In accordance with the requirements of 37 C.F.R. §§ 1.97 and 1.98, attached please find a Form PTO-1449 listing information for consideration by the Office in connection with its examination of the above-captioned patent application. Copies of each document listed are enclosed herein.

Applicants submit that no representation is made, and no representation is intended, that more relevant material does not exist, or that the order of presentation of these materials in any way reflects their relative pertinence. The listing on the attached Form PTO-1449 is not intended to constitute an admission of any kind. Specifically, this presentation is not an admission that any of the items listed are properly citable against the above-identified application as prior art.

Respectfully submitted,

By:   
Karen L. Knezek  
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KLK:ld

March 12, 2002

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	Rajinder S. Sidhu, et al.	GROUP	
	FILING DATE	September 19, 2001	

## U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	AA						

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	AB						

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.).

AC	Ballance, et al. 1985. "Development of a high frequency transforming vector for <i>Aspergillus nidulans</i> ," <i>Gene</i> 36:321-331
AD	Barnes, et al. 1992. "Yeast proteins associated with microtubules <i>in vitro</i> and <i>in vivo</i> ," <i>Mol Biol Cell</i> 3:29-47
AE	Baum, et al. 1981. "Taxol, a microtubule stabilizing agent, blocks the replication of <i>Trypanosoma cruzi</i> ," <i>Proc Natl Acad Sci USA</i> 78:4571-4575
AF	Cameron et al. 1990. "Cloning and analysis of $\beta$ -tubulin gene from a prototist," <i>J Biol Chem</i> 265:15245-15252
AG	Davidse, L.C. and Flach, W. 1977. "Differential binding of methyl benzimidazole-2-yl-carbamate to fungal tubulin as a mechanism of resistance to this antimitotic agent in mutant strains of <i>Aspergillus nidulans</i> ," <i>J Cell Biol</i> 72:174-193
AH	Davidse, L.C. and Flach, W. 1978. "Interaction of thiabendazole with fungal tubulin," <i>Biochim Biophys Acta</i> 543:82-90
AI	Duerr et al. 1981. "Molecular analysis of cytoplasmic microtubules <i>in situ</i> : identification of both widespread and specific proteins," <i>Cell</i> 24:203-211
AJ	Ealick, et al. 1991. "Application of crystallographic and modeling methods in the design of purine nucleoside phosphorylase inhibitors," <i>Proc. Natl. Acad. Sci. USA</i> 88:11540-11544
AK	Farr, G.W. and Sternlicht, H. 1992. "Site-directed mutagenesis of the GTP-binding domain of $\beta$ -tubulin," <i>J Mol Biol</i> 227:307-321
AL	Fujimura, et al. 1992. "A single amino-acid substitution in the beta-tubulin gene of <i>Neurospora</i> confers both cabendazim resistance and diethofencarb sensitivity," <i>Curr Genet</i> 21:399-404

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	Rajinder S. Sidhu, et al.	
FILING DATE	GROUP	
September 19, 2001	1646	

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BA	Giannakakou, et al. 1997. "Paclitaxel-resistant human ovarian cancer cells have mutant $\beta$ -tubulins that exhibit impaired paclitaxel-driven polymerization," <i>J Biol Chem</i> 272:17118-17125
BB	Goldman et al. 1993. "A nucleotide substitution in one of the $\beta$ -tubulin genes of <i>Trichoderma viride</i> confers resistance to the antimitotic drug methyl benzimidazole-2-yl-carbamate," <i>Mol Gen Genet</i> 240:73-80
BC	Hiraoka, et al. 1984. "The NDA3 gene of fission yeast encodes $\beta$ -tubulin: a cold sensitive <i>nda3</i> mutation reversibly blocks spindle formation and chromosome movement in mitosis," <i>Cell</i> 39:349-358
BD	Horwitz, S.B. 1992. "Mechanism of action of taxol," <i>Trends Pharmacol Sci</i> 13:134-136
BE	Jachez et al. 1993. "Restoration of taxol sensitivity of multidrug-resistant cells by the cyclosporine SDZ PSC 833 and the cyclopeptide SDZ 280-446," <i>J Natl Cancer Inst</i> 85:478-482
BF	Jung, et al. 1992. "Amino acid alterations in the $\beta$ -tubulin gene of <i>Aspergillus nidulans</i> that confer benomyl resistance," <i>Cell Motil Cytoskeleton</i> 22:170-174
BG	Jung, M.K. and Oakley, B.R. 1990. "Identification of an amino acid substitution in the benA, $\beta$ -tubulin gene of <i>Aspergillus nidulans</i> that confers thiabendazole resistance and benomyl supersensitivity," <i>Cell Motil Cytoskeleton</i> 17:87-94
BH	Kellogg, et al. 1989. "Identification of microtubule-associated proteins in the centrosome, spindle, and kinetochore of the early <i>Drosophila</i> embryo," <i>J Cell Biol</i> 109:2977-2991
BI	Kilmartin, J.V. 1981. "Purification of yeast tubulin by self-assembly <i>in vitro</i> ," <i>Biochem</i> 20:3629-3633
BJ	Li, et al. 1996. "Endophytic taxol-producing fungi from bald cypress, <i>Taxodium distichum</i> ," <i>Microbiol</i> 142:2223-2226
BK	Li, et al. 1998. "Stimulation of taxol production in liquid cultures of <i>Pestalotiopsis microspora</i> ," <i>Mycol Res</i> 102:461-464
BL	Li, et al. 1998. "The induction of taxol production in the endophytic fungus- <i>Periconia</i> sp. from <i>Torreya grandifolia</i> ," <i>J Ind Microbiol Biotechnol</i> 20:259-264

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CA	Linse, K. and Mandelkow, E.M. 1988. "The GTP-binding peptide of $\beta$ -tubulin: localization by direct photoaffinity labeling and comparison with nucleotide-binding proteins," <i>J Biol Chem</i> 263:15205-15210
CB	Long, D.M., et al., 1998, "In Vivo Addition of Telomeric Repeats to Foreign DNA Generates Extrachromosomal DNAs in the Taxol-producing Fungus <i>Pestalotiopsis microspora</i> ," <i>Fungal Genetics and Biology</i> 24: 335-344
CC	Manfredi, et al. 1982. "Taxol binds to cellular microtubules," <i>J Cell Biol</i> 94:688-696
CD	Manfredi, J.J. and Horwitz, S.B. 1984. "Taxol: an antimitotic agent with a new mechanism of action," <i>Pharmacol Ther</i> 25:83-125
CE	May, et al. 1987. " <i>Aspergillus nidulans</i> $\beta$ -tubulin genes are usually divergent," <i>Gene</i> 55:231-243
CF	Mu, J.H., et al., 1999, "Analysis of $\beta$ -tubulin cDNAs from taxol-resistant <i>Pestalotiopsis microspora</i> and taxol-sensitive <i>Pythium ultimum</i> and comparison of the taxol-binding properties of their products," <i>Mol Gen Genet</i> 262:857-868
CG	Neff, et al. 1983. "Isolation of the $\beta$ -tubulin gene from yeast and demonstration of its essential function <i>in vivo</i> ," <i>Cell</i> 33:211-219
CH	Nogales, et al. 1998. "Structure of the $\alpha\beta$ tubulin dimer by electron crystallography," <i>Nature</i> 391:199-203
CI	Nogales, et al. 1999. "High-resolution model of the microtubule," <i>Cell</i> 96:79-88
CJ	Orbach, et al. 1986. "Cloning and characterization of the gene for $\beta$ -tubulin from a benomyl-resistant mutant of <i>Neurospora crassa</i> and its use as a dominant selectable marker," <i>Mol Cell Biol</i> 6:2452-2461
CK	Parness, J. and Horwitz, S.B. 1981 "Taxol binds to polymerized tubulin <i>in vitro</i> ," <i>J Cell Biol</i> 91:479-487
CL	Panaccione et al. 1988. " <i>Colletotrichum graminicola</i> transformed with homologous and heterologous benomyl-resistance genes retains expected pathogenicity to corn," <i>Mol Plant Microbe Interact</i> 1:113-120
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DA		Proudfoot, N.J. and Brownlee, G.G. 1976. "3' Non-coding region sequences in eukaryotic messenger RNA," <i>Nature</i> 263:211-214
DB		Rao, et al. 1994. "3'-(p-Azidobenzamido) taxol photolabels the N-terminal 31 amino acids of $\beta$ -tubulin," <i>J Biol Chem</i> 269:3132-3134
DC		Rao, et al. 1995. "Characterization of the taxol binding site on the microtubule," <i>J Biol Chem</i> 270:20235-20238
DD		Rossmann, et al. 1992. "Application of crystallography to the design of antiviral agents," <i>Infectious Agents and Disease</i> 1:3-10
DE		Rowinsky, E.K. and Donehower, R.C. 1991. "The clinical pharmacology and use of antimicrotubule agents in cancer chemotherapy," <i>Pharmacol Ther</i> 52:35-84
DF		Schiff, et al. 1979. "Promotion of microtubule assembly in vitro by taxol" <i>Nature</i> 277:665-667
DG		Schliwa et al. 1981. "Stabilization of the cytoplasmic ground substance in detergent-opened cells and a structural and biochemical analysis of its composition," <i>Proc Natl Acad Sci USA</i> 78:4329-4333
DH		Stierle, et al. 1993. "Taxol and taxane production by <i>Taxomyces andreanae</i> , an endophytic fungus of pacific yew," <i>Science</i> 260:214-216
DI		Strobel, et al. 1996. "Taxol from fungal endophytes and the issue of biodiversity," <i>J Ind Microbiol</i> 17:417-423
DJ		Strobel, et al. 1996. "Taxol from <i>Pestalotiopsis microspora</i> , an endophytic fungus of <i>Taxus wallachiana</i> ," <i>Microbiolog</i> 142:435-440
DK		Sullivan, K.F. 1988. "Structure and utilization of tubulin isotypes," <i>Ann Rev Cell Biol</i> 4:687-716
DL		Thomas, et al. 1985. "Isolation and characterization of mutations in the $\beta$ -tubulin gene of <i>Saccharomyces cerevisiae</i> ," <i>Genetics</i> 112:715-734

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EA	Wani, et al. 1971. "Plant antitumor agents. VI. The isolation and structure of taxol, a novel antileukemic and antitumor agent from <i>Taxus brevifolia</i> ," <i>J Am Chem Soc</i> 93:2325-2327
EB	Weerakoon et al. 1998. "Isolation and characterization of the single β-tubulin gene in <i>Phytophthora cinnamomi</i> ," <i>Mycologia</i> 90:85-95
EC	Yen, et al. 1988. "Autoregulated instability of β-tubulin mRNAs by recognition of the nascent amino terminus of β-tubulin," <i>Nature</i> 334:580-585
ED	Yoon, Y. and Oakley, B.R. 1995. "Purification and characterization of assembly-competent tubulin from <i>Aspergillus nidulans</i> ," <i>Biochem</i> 34:6373-6381
EE	Young, et al. 1992. "Antifungal properties of taxol and various analogues," <i>Experientia</i> 48:882-885
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